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DESCRIPTION OF A RING-TAILED OPOSSUM,  
REGARDED AS A VARIETY OF  
*PSEUDOCHIRUS HERBERTENSIS*, COLLETT.

By EDGAR R. WAITE, F.L.S., Zoologist.

HAVING recently had occasion to overhaul our duplicate collection of Marsupials, my attention was arrested by a number of specimens labelled *Pseudochirus herbertensis*. Out of twenty-two examples, seventeen were undoubtedly of this species, but the remainder presented some differences. I therefore consulted Mr. Robert Grant, by whom the Herbert River animals were procured. Unhesitatingly picking out the five forms I had marked, he told me that he was convinced that they were quite distinct from the "Outas" (*P. herbertensis*), and had so reported when unpacking the collection in 1889.

The following notes are supplied to me by Mr. Grant:— Although found in the same district as *P. herbertensis* and *P. lemuroides*, the smaller and much rarer animal was obtained within a comparatively limited area, the exact locality being known as the Boar Pocket, on the Tinaroo track, near Cairns, Queensland (or, in the language of the blacks, "Wamarama Rigarami"). This spot lies low, and is swampy. *P. herbertensis*, although obtained on the outskirts of the swamp, is an inhabitant of the higher land and ascends to the tops of tallest trees, while the swamp animal is not a high climber, and several of them were found in the Davidsonia plum tree (*D. pruriens*, F. v. M.)

Another interesting fact is that this animal builds a nest or drey not unlike that of the common Ring-tailed Opossum (*P. peregrinus*), but more ball-like in shape. In passing it may be mentioned that this latter species generally builds its nest near to creeks or in moist gullies. *P. herbertensis* never builds a nest, so the natives say.

The blacks instantly recognised the animal as distinct and called it "Moki poki." Mr. Grant would throw upon the ground a few examples of *P. herbertensis*, which the blacks would at once name "Outa." One of the swamp forms would next be cast down, when they would laugh and remark, "No more 'Outa,'—'Moki poki.'"

Although smaller than the "Outa," the animals obtained were fully adult, as our collector took young ones from the pouches of the females.

For reasons hereafter given, I do not feel justified in regarding this animal as a distinct species, although in view of its peculiarities of fur, tail, and habit, it may ultimately be deemed worthy of specific rank. At present I prefer to regard it as a well-marked variety of *P. herbertensis*, and deserving of at least a varietal name. I have, therefore, much pleasure in associating with it the name of Dr. Robert Collett, of Christiania, whose researches into the fauna of Australia, and of the genus *Pseudochirus* in particular, are well known.

This form will therefore be known as:—

PSEUDOCHIRUS HERBERTENSIS, var. COLLETTI.

Animal smaller. Fur markedly longer, less wavy, much finer and softer to the touch than in the typical form. Much greyer and darker in colour, the hairs behind the shoulders being usually tipped with white or pale yellow: the rump and coloured portion of the tail black. The ears are rich rufous without and the chin is grey. The naked portion beneath the tail is smooth, not sharply defined from the hairy part and of less extent than in the typical race.

The dimensions of five animals are as follows:—

	A.	B.	C.	D.	E.
Head and body ...	320	320	300	290	260 mm.
Tail ... ..	310	310	290	280	245 mm.

*Skull*.—Excepting for its relatively smaller size, the skull scarcely differs from typical examples, and mainly for this reason I hesitate to accord the form more than varietal rank. It may be noticed, however, that the facial index is higher than that of *P. herbertensis*, as determined by Thomas.\*

The principal skull dimensions are as follows:—

	mm.
Basal length ... ..	62·4
Greatest breadth ... ..	35·6
Nasals, length ... ..	23·8
"  greatest breadth ... ..	8·5
"  least breadth ... ..	3·7
Constriction, breadth ... ..	7·4
Palate, length ... ..	37·9
"  breadth outside $M^2$ ... ..	18·2
"  "  inside $M^2$ ... ..	12·1
Palatal foramen ... ..	5·4
Basi-cranial axis ... ..	21·2
Basi-facial axis ... ..	41·0
Facial index ... ..	193

\* Thomas—Brit. Mus. Cat. Marsup., 1888, p. 185.

				mm.
Teeth, horizontal length of $I^2$	...	...	...	1.5
„ height of <i>Canine</i>	...	...	...	2.3
„ length of $P^4$	...	...	...	3.2
„ length of $M^{1-3}$	..	...	...	11.4
„ diastema of $I^3$ and <i>C.</i>	...	...	...	3.7
„ „ <i>C.</i> and $P^1$	...	...	...	2.8
„ „ $P^1$ and $P^3$	...	...	...	1.0
„ length of lower $I^1$	...	...	...	9.8

It is interesting to notice that the structure of the tail corresponds with the habits of the animals; thus, in *P. herbertensis*, which ascends the highest trees, the lower surface is naked for a greater portion of its length and is roughened so as to afford a secure grip of the topmost wind-swayed branches. In its more lowly habit, *P. colletti* avoids such positions, and has therefore less need of special adaptation.

It may be mentioned that *P. mongon*, De Vis,\* of which we hold co-types from the describer, exhibits none of the characters here sought to be emphasised, and except in the markings does not differ from typical examples of *P. herbertensis*, as previously determined.

## THE NEST OR DREY OF THE RING-TAILED OPOSSUM, (*PSEUDOCHIRUS PEREGRINUS*, BODD).

BY EDGAR R. WAITE, F.L.S., Zoologist.

(Plate xix.)

ONE of the most peculiar and interesting habits of the Ring-tailed Opossum (*Pseudochirus peregrinus*, Bodd), is that of making a nest or drey. Although well-known, but little appears to have been written on the subject beyond the notice that it is not unlike that of the European Squirrel.

I as often found the drey of this latter animal in a hole in a tree as among the branches, a situation never utilised by the Opossum. The nest of the Marsupial may be constructed either in a fork or upon a platform of interlaced twigs. A thick bush is more favoured than a tree, but almost any growth, if sufficiently dense, may be made use of: the Lilly Pilly (*Eugenia*), offers a congenial retreat, as does also the Tea Tree (*Melaleuca*), its long strips of loose bark being frequently woven into the nest. The native "Oaks" (*Casuarina*), and the Wattles (*Acacia*), are further favourites. Preference is shown for the neighbourhood of water.

\* De Vis—Proc. Linn. Soc. N.S. Wales (2) i., 1887, p. 1130.